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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/827,507 | 04/06/2001 | Tri Minh Nguyen | 81855.0008 | 6108 |

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| EXAMINER | |
| JARRETT, RYAN A | |
| ART UNIT | PAPER NUMBER |

2125

DATE MAILED: 01/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|-----------------------------|---|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/827,507 | NGUYEN, TRI MINH | |
| | Examiner Ryan A. Jarrett | Art Unit 2125 | |
| -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -- | | | |
| Period for Reply | | | |
| <p>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</p> <ul style="list-style-type: none"> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | |
| Status | | | |
| <p>1)<input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>06 April 2001</u>.</p> <p>2a)<input type="checkbox"/> This action is FINAL. 2b)<input checked="" type="checkbox"/> This action is non-final.</p> <p>3)<input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p> | | | |
| Disposition of Claims | | | |
| <p>4)<input checked="" type="checkbox"/> Claim(s) <u>1-25</u> is/are pending in the application.</p> <p>4a) Of the above claim(s) _____ is/are withdrawn from consideration.</p> <p>5)<input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>6)<input checked="" type="checkbox"/> Claim(s) <u>1-25</u> is/are rejected.</p> <p>7)<input checked="" type="checkbox"/> Claim(s) <u>17, 19 and 23</u> is/are objected to.</p> <p>8)<input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p> | | | |
| Application Papers | | | |
| <p>9)<input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10)<input checked="" type="checkbox"/> The drawing(s) filed on <u>06 April 2001</u> is/are: a)<input type="checkbox"/> accepted or b)<input checked="" type="checkbox"/> objected to by the Examiner.</p> <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> | | | |
| <p>11)<input type="checkbox"/> The proposed drawing correction filed on _____ is: a)<input type="checkbox"/> approved b)<input type="checkbox"/> disapproved by the Examiner.</p> <p style="margin-left: 20px;">If approved, corrected drawings are required in reply to this Office action.</p> <p>12)<input type="checkbox"/> The oath or declaration is objected to by the Examiner.</p> | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | |
| <p>13)<input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a)<input type="checkbox"/> All b)<input type="checkbox"/> Some * c)<input type="checkbox"/> None of:</p> <p style="margin-left: 20px;">1.<input type="checkbox"/> Certified copies of the priority documents have been received.</p> <p style="margin-left: 20px;">2.<input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</p> <p style="margin-left: 20px;">3.<input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p> <p>* See the attached detailed Office action for a list of the certified copies not received.</p> | | | |
| <p>14)<input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).</p> <p>a)<input type="checkbox"/> The translation of the foreign language provisional application has been received.</p> <p>15)<input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</p> | | | |
| Attachment(s) | | | |
| <p>1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.</p> | | <p>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____.</p> | |

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required if the application is allowed. Additionally, most of Fig. 4 is not legible.

Claim Objections

2. Claims 17 and 19 reference themselves. Appropriate correction is required.

3. Applicant should amend claim 23 to depend from claim 22 (and not claim 21) if that is his intention.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8, 16, 22, and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "is replaced with said defective part corresponding to a replaced component." It is unclear how this limitation relates to the rest of the claim. Appropriate correction is required.

Claim 16 recites the limitation "responsible business functions" in claim 3. There is insufficient antecedent basis for this limitation in the claim. Claim 16 should instead depend from claim 4.

Claim 22 recites the limitation "said assembling stations" in line 8. There is insufficient antecedent basis for this limitation in the claim. This limitation should be changed to "said production stations." Additionally, the limitation "units" in line 2 should be changed to "components" in order to remain consistent the limitation in line 3. Additionally, the limitation "The method" in line 1 should be changed to "A method".

Claims 22-25 recite the limitation "said inputted information". This limitation should be changed to "said inputted inspection information" since there are various other pieces of information being "inputted" in these claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 1-4, 9-18, 20, 22-25 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Thiel et al. U.S. Patent No. 6,381,509. Referring to claims 1 and 22-25, Thiel et al. discloses a method of monitoring the manufacturing status of a machine comprising the steps of: assigning a machine identifier to a machine comprised of one or more components, each one or more components to be incorporated into the machine at one or more production stations, wherein each one or more production

stations is assigned a production station identifier (col. 3 lines 23-36); inputting the machine identifier into at least one memory of a first computer; inputting a unit control identifier for each one or more components wherein the unit control identifier is linked to the production station identifier where the unit control identifier is input (col. 9 lines 13-27); inputting defect information for each one or more component into the memory at an inspecting station, wherein each inspecting station is assigned an inspecting station identifier, so that the defect information and the unit control identifier are linked to the inspecting station where the defect information is input (col. 9 lines 13-27); linking the stored unit control identifier and the stored machine identifier (col. 7 lines 19-23); and outputting defect information which includes at least one of the machine identifier and the unit control identifier, wherein the machine history in manufacturing is traced later (col. 3 lines 43-47).

Referring to claims 2-4, 9-18, and 20, Thiel et al. discloses that the machine identifier and the unit control identifier are input by scanning bar codes assigned to the machine and the component (col. 4 lines 12-22); wherein the defect information includes at least one defect phenomenon (inherent); further comprising the steps of: inputting a business function identifier into the memory, wherein the business function identifier identifies the party responsible for resolving the at least one defect phenomena (col. 9 lines 62-67, col. 11 lines 6-12); wherein said output is displayed on a second computer that is connected to the first computer through a network (Fig. 1); further comprising the step(s) of: inputting the time when said defect phenomena occurred (col. 1 lines 38-39); wherein said output is accessed in real time (col. 11 lines 6-12); wherein

the information in the memory can be retrieved by selecting at least one of the machine identifier, the unit control identifier, the production station identifier and the inspection station identifier (inherent in col. 9 lines 13-27 since all are linked); wherein the information in said memory can be sorted by using at least one of the machine number, the unit control identifier, the production station identifier and the inspection station identifier (genealogy server/host computer inherently capable of this performing this task); wherein the output is printed out daily (implied in col. 6 lines 57-60, col. 13 lines 10-12); further comprising the step of: calculating the number of detected defects (col. 12 line 59 – col. 14 line 43); further comprising the step(s) of: selecting designating stations among said responsible business functions to send message through said network to said selected responsible business functions; further comprising the step of: selecting at least one of said business functions to see messages that are sent from said selected stations (col. 9 lines 62-67, col. 11 lines 6-12); wherein said outputting process comprises the steps of: counting the number of times of said defect and the number of times of manufactured component (col. 13 lines 18-20); calculating statistics which relate to said defect automatically; and outputting said calculated statistics (col. 12 lines 59-60); further comprising the steps of: inputting the at least one defect phenomena for each machine into the memory at a quality assurance station, wherein said quality assurance station has a quality assurance identifier, and wherein the quality assurance station is linked to the machine number (col. 12 line 59 – col. 13 line 20).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5-7, 19, and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Thiel et al. as applied to claims 4 and 18 above, and further in view of Official Notice. Referring to claims 5-7, Thiel et al. does not specifically disclose the steps of inputting a resolving method for the at least one defect phenomena into the memory; wherein the resolving method is selected from a list of pre-stored resolving methods; wherein the selected resolving method is stored in the memory for later use. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select a possible solution method for the identified defects of Thiel et al. since Examiner takes Official Notice that it is well known in the art initiate a corrective action when a defect is discovered in a manufacturing operation in order to prevent the product from being scrapped and to prevent the problem from recurring again.

Referring to claim 19, Thiel et al. does not specifically disclose that the defect information includes at least one of defect rates and rates without defect. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include defect rate in the defect output information of Thiel et al. since Examiner takes Official Notice that it is well known to track defect rates when

conducting quality control in a manufacturing operation in order ensure that plant output meets a certain minimum level of efficiency.

Referring to claim 21, Thiel et al. does not specifically disclose the steps of: inputting a second machine identifier into the memory, wherein the second machine identifier is assigned to each machine and is different from the first machine identifier; counting an input quantity at a production station based on the stored first machine identifier and an output quantity from a second production station based on the stored second machine identifier; and generating a work-in-process number from at least the input quantity and the output quantity. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use this method to generate the work-in-process number for the manufacturing line of Thiel et al. since Examiner takes Official Notice that this is a well-known method of calculating the work-in-process in a manufacturing operation.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kobayashi et al. U.S. Patent No. 5,231,585 discloses a computer-integrated manufacturing system.

Maejima et al. U.S. Patent No. 5,353,230 discloses a data managing system for a work production line.

Cipelletti et al. U.S. Patent No. 5,673,194 discloses a recording system for a production line.

Tau et al. U.S. Patent No. 5,751,581 discloses a material movement server.

Cheong et al. U.S. Patent No. 6,055,463 discloses a control system for a semiconductor IC test process.

Lynch et al. U.S. Patent No. 6,148,245 discloses a method for sharing processing information in a manufacturing facility.

Hassel U.S. Patent No. 6,246,919 discloses a product data management system.

Romero et al. U.S. Patent No. 6,256,549 discloses integrated manufacturing solutions.

Nair et al. U.S. Patent No. 6,366,824 discloses a manufacturing reference database.

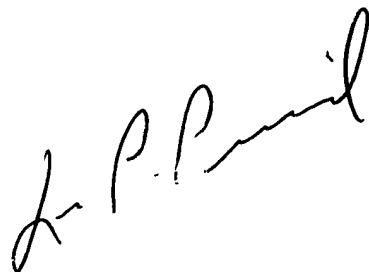
Hopkins et al. U.S. Patent No. 6,507,765 discloses a computer integrated manufacturing control and information system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (703) 308-4739. The examiner can normally be reached on 9:30-6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703) 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

raj
January 17, 2003

A handwritten signature in black ink, appearing to read "J. P. Picard".

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100